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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/020,647   | 12/12/2001  | David A. Ostergaard  | 29096/37999         | 7282             |
| 4743   | 7590        | 04/13/2004           | EXAMINER            |                  |
| MARSHALL, GERSTEIN & BORUN LLP<br>6300 SEARS TOWER<br>233 S. WACKER DRIVE<br>CHICAGO, IL 60606 |             |                      | KOHNER, MATTHEW J   |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3653                |                  |

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                                     |  |
|------------------------------|------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>                 |  |
|                              | 10/020,647             | OSTERGAARD, DAVID A.<br><i>M.W.</i> |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>                     |  |
|                              | Matthew J Kohner       | 3653                                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 January 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-5 and 7-13 is/are rejected.  
 7) Claim(s) 6 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Response to Arguments /Amendments**

In light of applicant's arguments, examiner withdraws the drawing objection and § 103 rejections made in the previous office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,340,469 to Archer in view of US Patent No. 4,470,324 to Renk et al.

Archer discloses a sealed wheel case (53) for use in a vibratory device, the vibratory device having a frame (See Fig. 2) and a rotating shaft extending transversely across the frame (See Fig. 2) and having a driven portion of the shaft being operatively coupled to a drive system (See Fig. 4), wherein the sealed wheel case includes:

- a housing having a base, peripheral sidewall (16), and a cover (84), which has an aperture to receive the shaft (See Fig. 4). Further, the housing holds the wheel and a quantity of lubricating oil (Col. 4, lines 65+);
- a seal (Archer discloses the housing is liquid tight {Col. 3, lines 45+}, therefore it is inherent that there is a seal around the shaft adjacent to the aperture in the cover to prevent the oil from leaking; see also Fig. 4);

- a plurality of attachment bolts (See Fig. 4).

Archer does not disclose an annular baffle mounted to an inside surface of the cover and extending into the wheel case wherein the baffle is positioned to generally surround the shaft and the seal.

Renk does disclose an annular baffle (55/56) mounted to an inside surface of the cover and extending into the wheel case wherein the baffle is positioned to generally surround the shaft and the seal. Further, Renk specifically discloses that his invention is not limited to a particular environment (Col. 2, lines 35+). There is motivation to use Renk's annular baffle in Archers device. It is supplied directly from the art itself. It is well known in the art that it is important for gear/wheel casings to both, keep contaminants out of the gear casing and prevent loss of lubricant (See e.g. Renk Col. 1, lines 15+). Renk discloses that his lubricant retaining devices act as a baffle to deflect lubricant spray from gear and wheel hub (Col. 7, lines 28+). Therefore, the annular baffles keep a majority of the oil from interfering the seals. It would be obvious to one of ordinary skill in the art to use Renk's device in a wheel casing such as Archer's.

In regard to claims 2, 8 and 11, labyrinth seals are well known in the art (See e.g. US Patent Nos. 5,220,846 to Niklewski, 4,170,549 to Johnson). Even Renk appears to use a type of labyrinth seal (See e.g. Fig. 4). It would be obvious to one of ordinary skill in the art to use such a seal in the type of housing disclosed by Archer.

In regard to claims 3, 9 and 12, See Fig. 3, where the inner edges of 55/56 do not meet gear 13.

In regard to claim 4, 10 and 13, see above arguments.

In regard to claim 5, the lubricant retaining devices 55/56 are attached to the cover (See Fig. 3).

***Allowable Subject Matter***

Claims 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Kohner whose telephone number is 703-305-8496. The examiner can normally be reached on Mon-Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matthew J. Kohner  
Examiner  
Art Unit 3653

MJK

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600